

Please **add new claims 7-13** as follows:

- A3
- 7. (New) The sensor according to claim 1, wherein the solid electrolyte element is a ceramic element.
 - 8. (New) The sensor according to claim 1, wherein the solid electrolyte element is ZrO_2 .
 - 9. (New) The sensor according to claim 1, wherein the second electrode is in a reference duct.
 - 10. (New) The sensor according to claim 1, wherein a heating voltage of 12 V is applied to the at least one heating element.
 - 11. (New) The sensor according to claim 1, wherein the at least one heating element is embedded in an electrical insulator.
 - 12. (New) The sensor according to claim 1, wherein a portion of the second electrode extends over the width of a reference duct and additionally acts as a shield against any coupling of heater voltage U_H .
 - 13. (New) An electrochemical sensor comprising:
 - a solid electrolyte element including at least one first electrode, at least one second electrode and at least one heating element, the at least one second electrode being situated closer than the at least one first electrode to the at least one heating element, the at least one second electrode being coupled to ground, the at least one first electrode coacting with the at least one second electrode and being negatively polarized such that coupling of heater voltage is effectively blocked.--
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